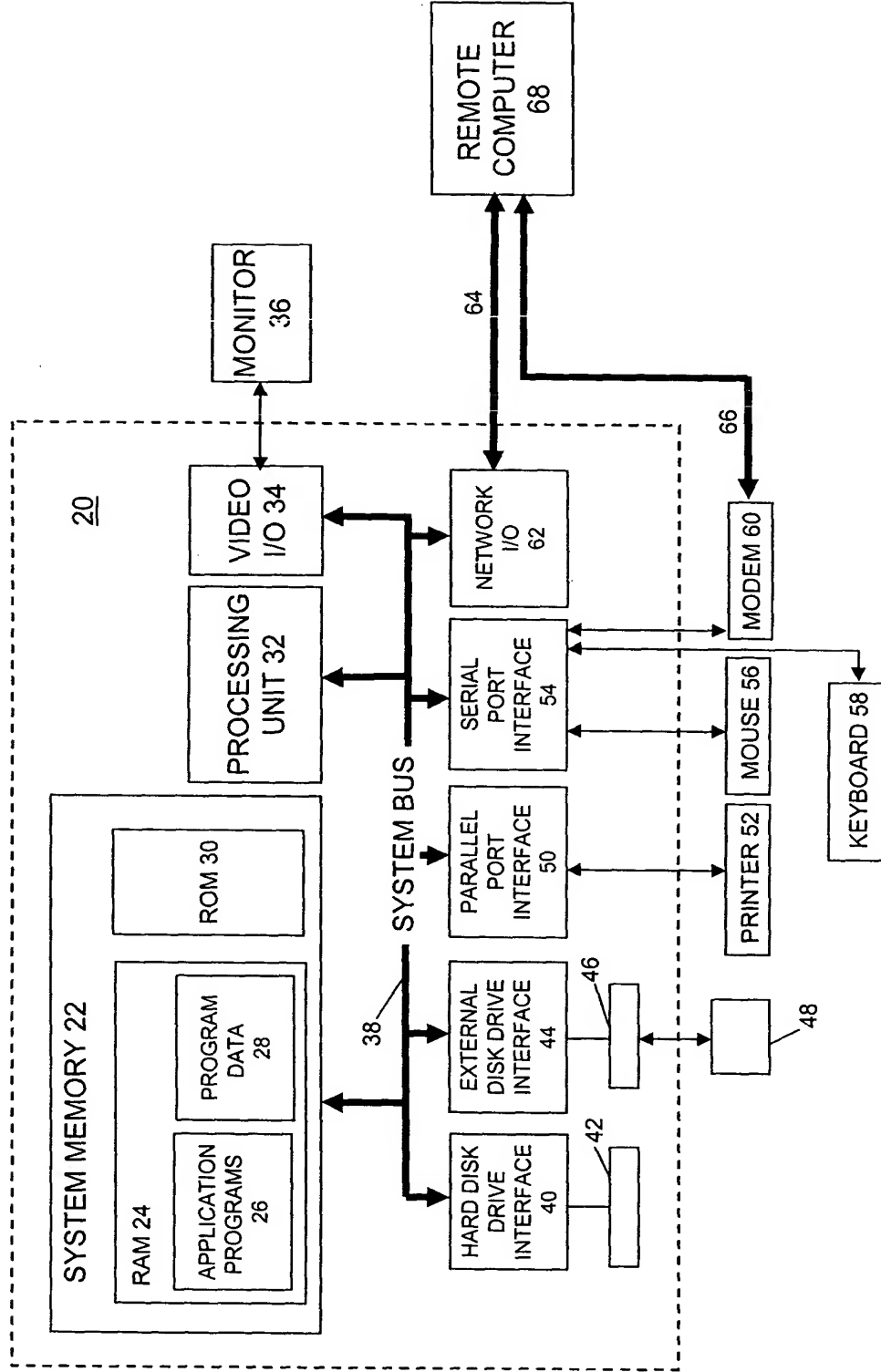


Figure 1



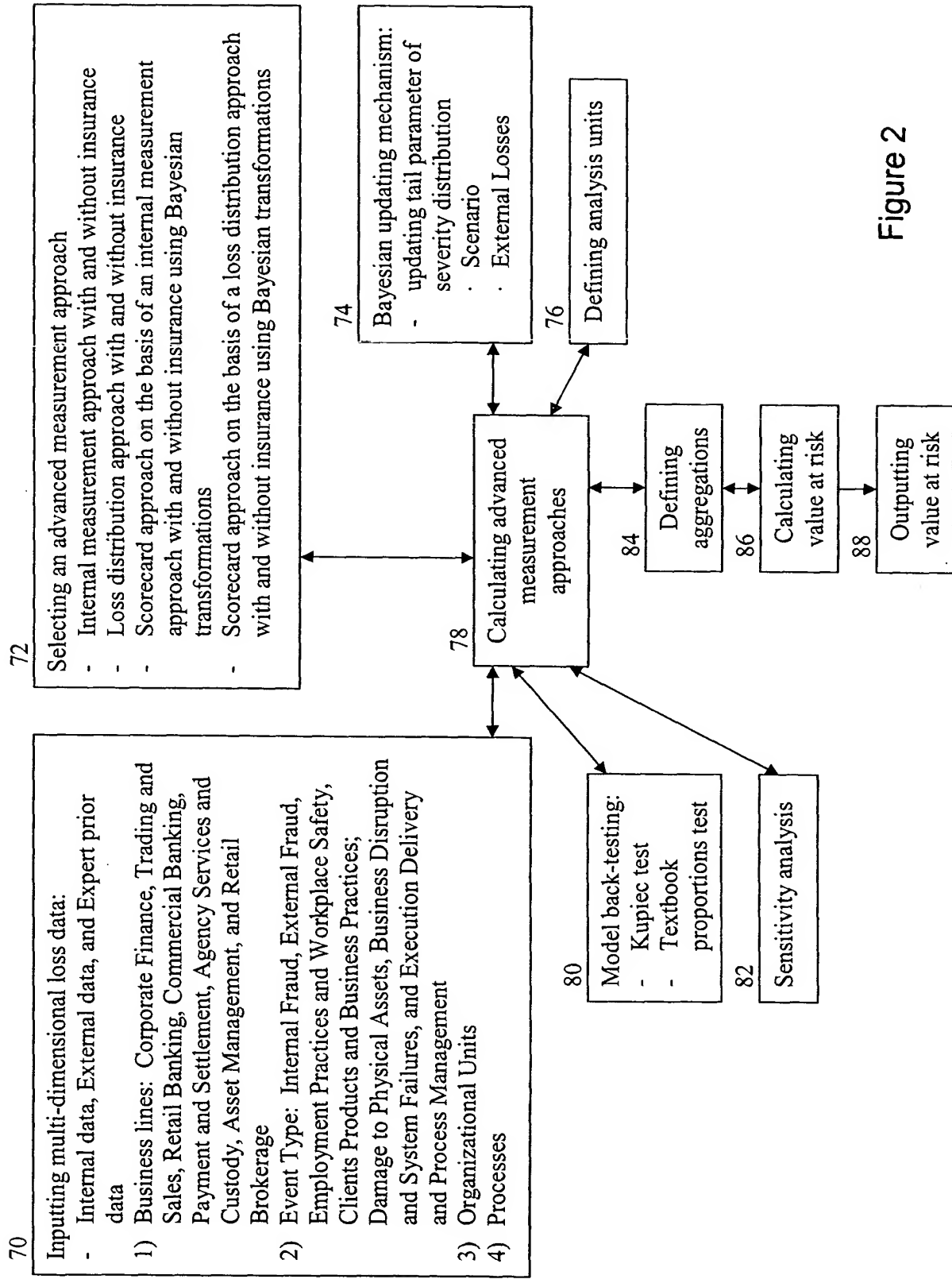


Figure 2

Figure 3

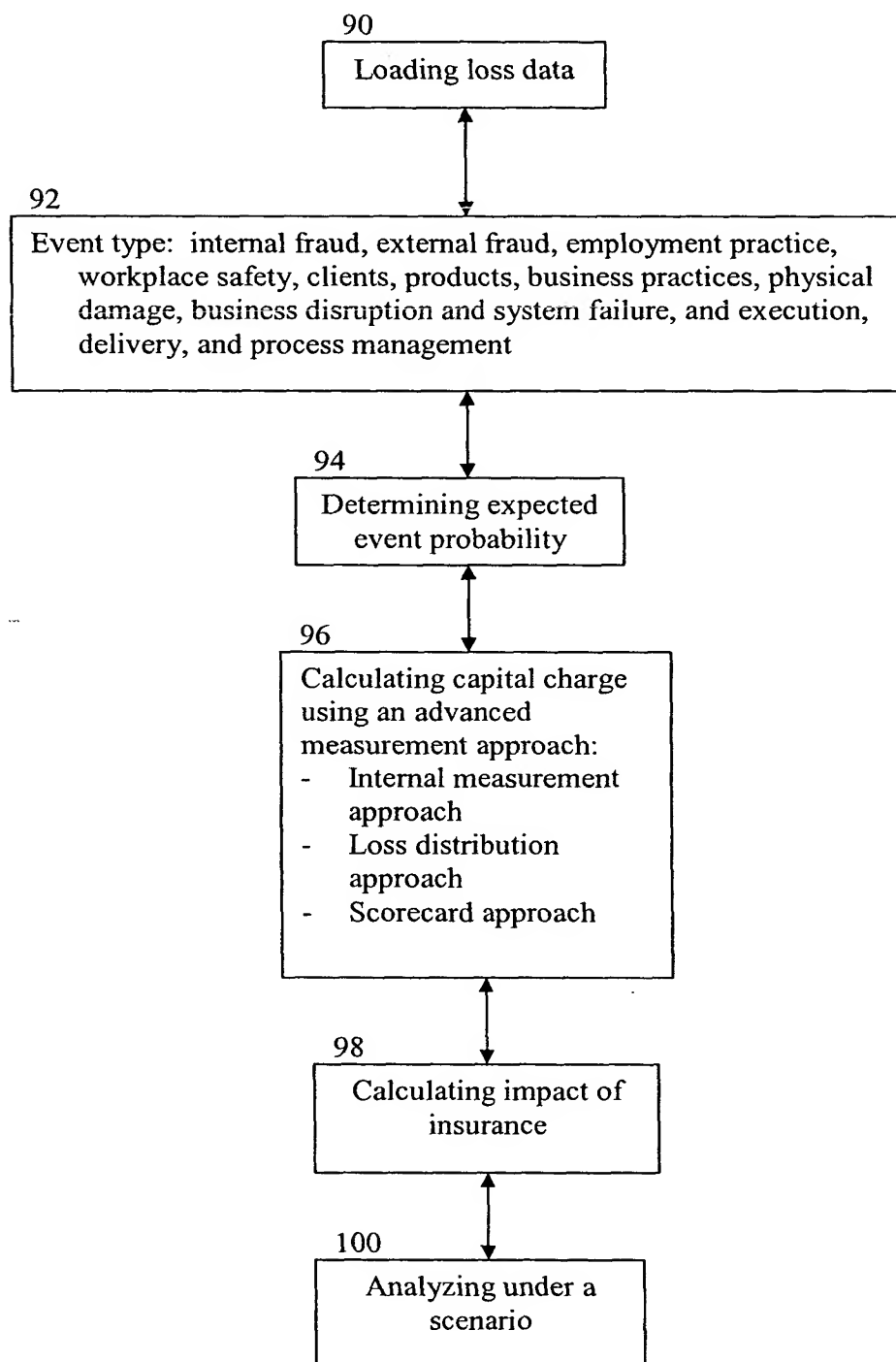


Figure 4

	Advantages	Disadvantages
IMA	<ul style="list-style-type: none"> <li>• Relatively easy to implement</li> <li>• Moderate loss data collection would suffice</li> <li>• Good maintenance properties</li> </ul>	<ul style="list-style-type: none"> <li>• Linear map from expected to unexpected loss required</li> <li>• Tendency of overstating the unexpected loss, thus leading to higher operational capital charge</li> </ul>
LDA	<ul style="list-style-type: none"> <li>• Genuine statistical model to determine the unexpected loss</li> <li>• Good basis for accurate calculation of operational capital charge</li> <li>• High flexibility ensures future validity</li> </ul>	<ul style="list-style-type: none"> <li>• Quite high implementation effort necessary as extensive loss data required (especially delicate for low frequency / high severity events)</li> <li>• Thorough understanding of methodology required to ensure maintenance</li> </ul>



Figure 5

Reduction of mean monthly frequency by	5%	10%	15%	20%	25%	30%
Total number of avoided losses during the 16 months	33.1	66.3	99.45	132.6	165.8	198.9
Mean monthly event frequency	39.37	37.30	35.22	33.15	31.08	29.01
VaR with 99.9% confidence in EUR	15.3 Mio	15.0 Mio	13.0 Mio	12.4 Mio	10.0 Mio	9.1 Mio

Figure 6

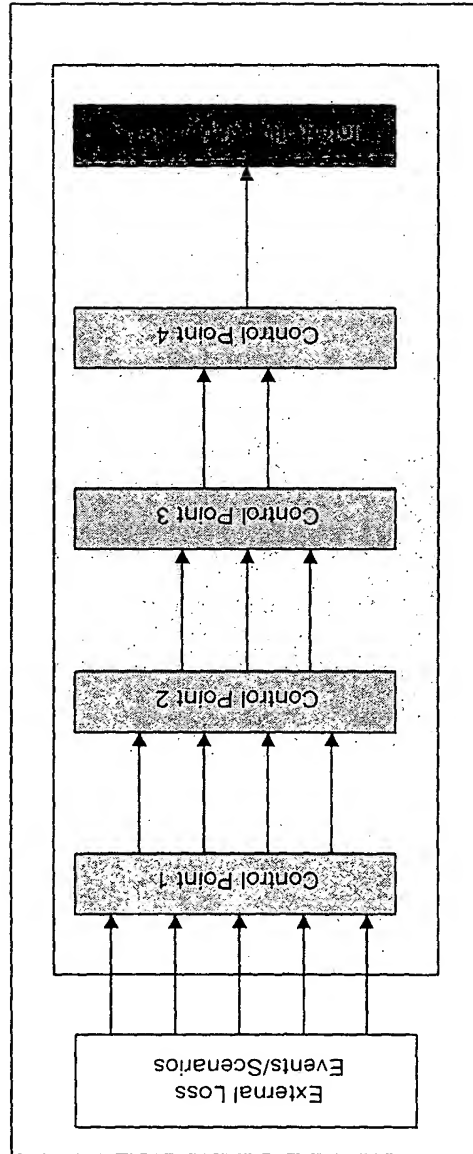


Figure 7

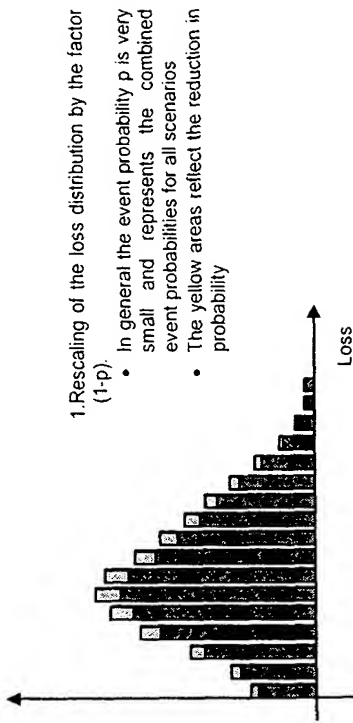


Figure 8

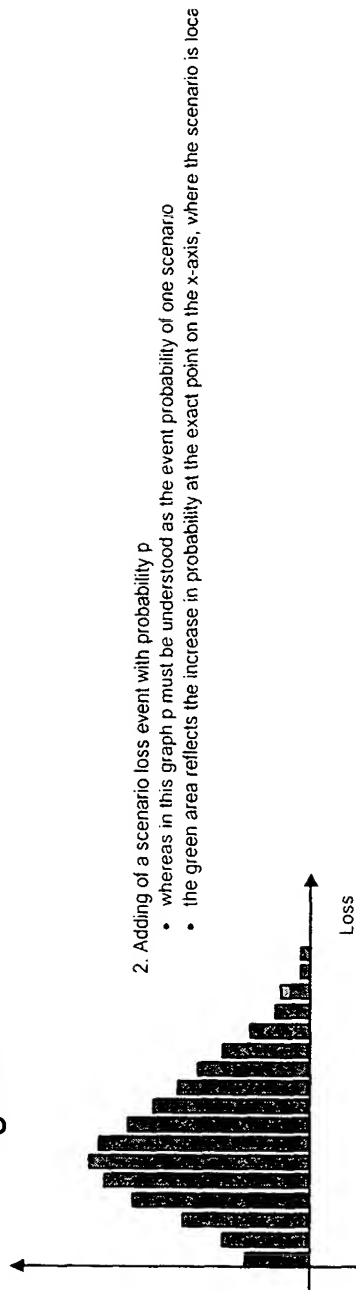
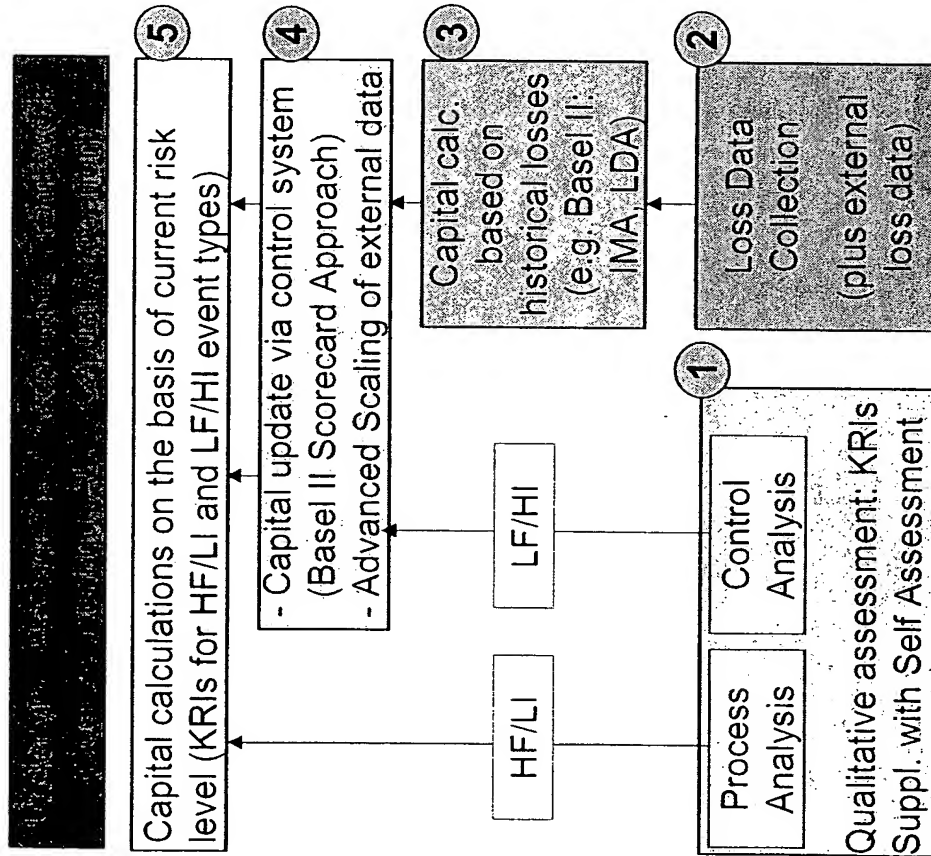


Figure 9

## ORM Functionality Requirements



## ORM Methodology\*

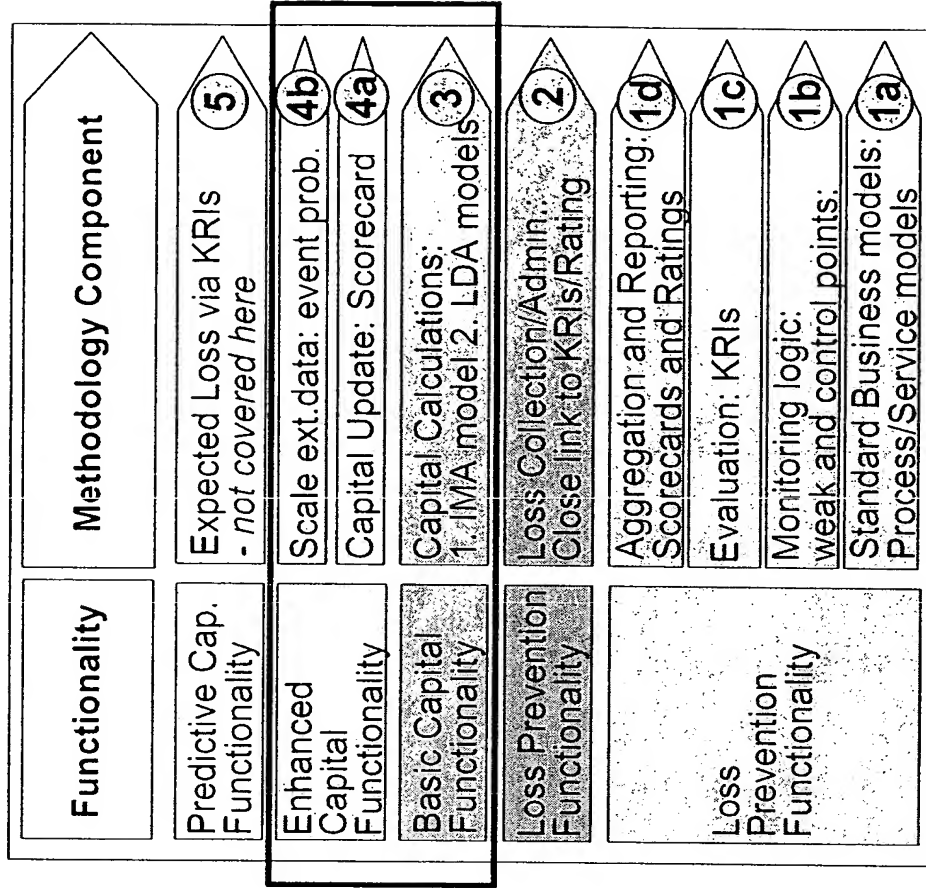


Figure 10

### Basic Capital Calculations (e.g. IMA und LDA)

The basic calculation functionality works with historical data only

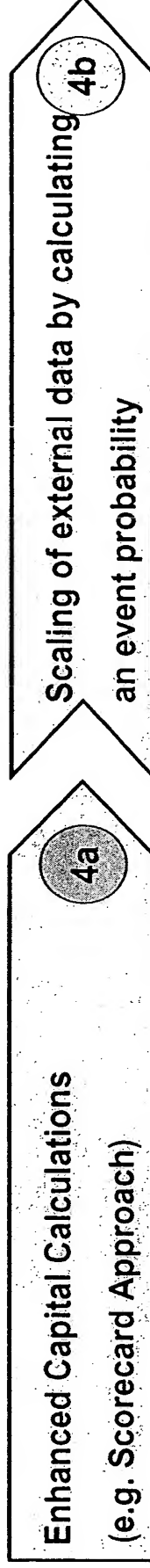
- **IMA:** linear map of expected and unexpected loss:  $K_{ijk} = \gamma_{ijk} \times EI_i \times PE_{ijk} \times LGE_{ijk} = \gamma_{ijk} \times EL_{ijk}$
- **LDA Loss Frequency**
  - Poisson or
  - In the case of Overdispersion: negative binomial
- **LDA Loss Severity:**
  - Lognormal for the body of the distribution
  - Extreme Value Theory for the tail
- Use of (pre-scaled) **external data**
- Inclusion of **insurance** (mathematical representation!)
- **Convolution** into overall loss distribution: Calculation of **VaR, Expected Shortfall, unexpected loss**
- **Flexible bottom-up Aggregation** of Analysis units into capital for the overall bank
  - Regulatory: Basel II-Matrix of 56 nodes
  - Internal MUST: Aggregation according to internal business lines and organizational units
- **Sensitivity analysis and Scenarios** (Stress Testing)

For the tail: Generalized Pareto

$$G_{\xi, \beta}(t) = \begin{cases} 1 - \left( 1 + \frac{\xi(t-u)}{\beta} \right)^{-1/\xi}, & \xi \neq 0 \\ 1 - \exp\left( -\frac{t-u}{\beta} \right) & \xi = 0 \end{cases}$$

Note: many banks use qualitative assessments or scalar data for capital allocation purposes of a top-down overall capital. This method is not covered by the prototype as the necessary mathematics and approach are straight-forward, but may differ substantially from bank to bank..

Figure 11



- **Enhanced capital calculation:** Updating the LDA via the risk levels in the control system (Assumption: KRIs and Scorecards in general are more up-to-date than the loss history)
- Two methods are used to update the frequency::
  - **Regression** based on a Poisson or a negative binomial model (depending on LDA used)
  - **Bayes Model, which includes an experts assessment of the risk level via the expected number of events per period:**

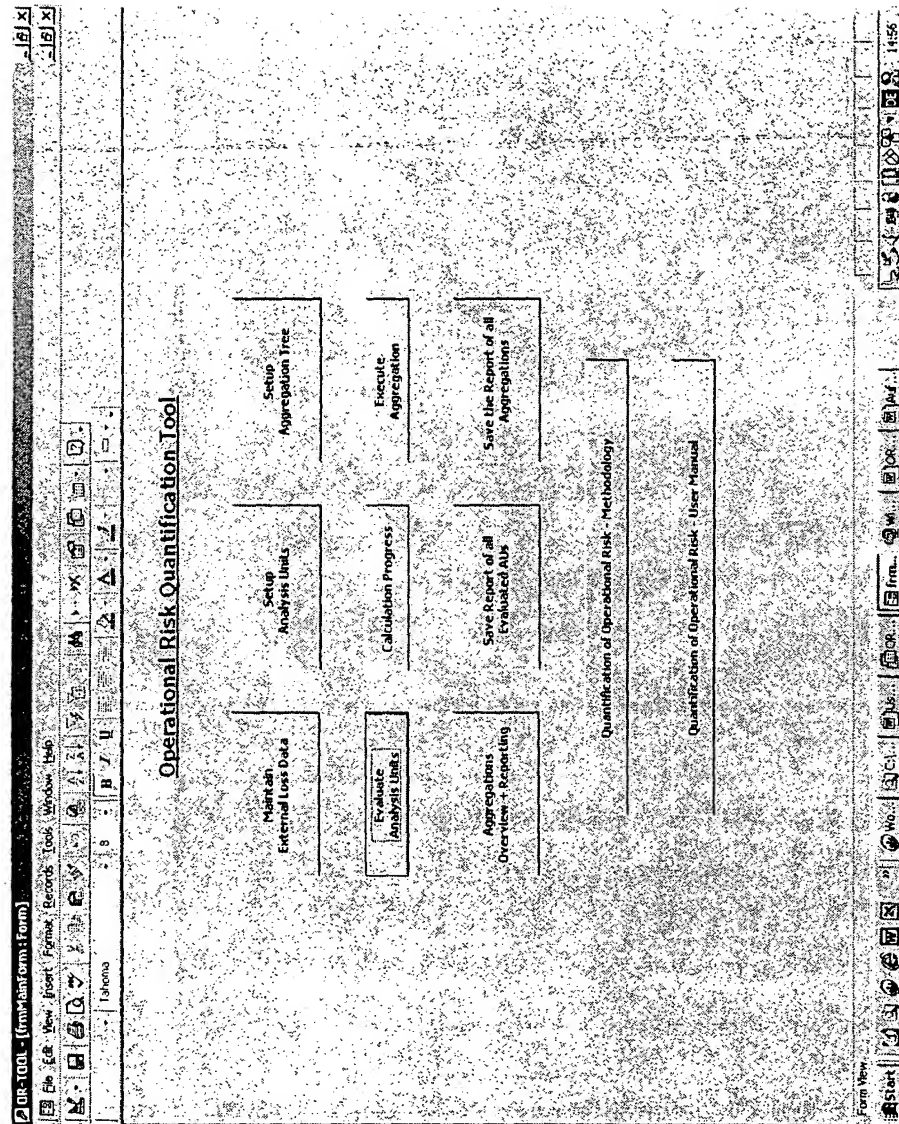
$$P(\text{Parameters} | \text{Data}) \propto P(\text{Data} | \text{Parameters})P(\text{Parameters})$$

- **Include Insurance**
- Calculation of VaR etc and aggregation as before

**Scaling of external data by calculating an event probability**

- Includes an extended (more precise) scaling mechanism for external data
  - Pre-scaling of the size of loss (in terms of a max loss)
  - Calculation of a probability of event for the external event via the control system
  - Prerequisite: Consistency in business model used for KRIs and loss collection

Figure 12



**2 OR-TOOL - (UnlimitedAnalysisUnit)**

File Edit View Print Format Records Tools Window Help

MS Sans Serif 8 Arial 10 Times New Roman 12

Please enter a name for the Unit you want to analyze: **Basel11**

Please choose a Business Line: **Corporate Finance**

Please choose an Event: **Internal Fraud**

Please choose a Process: **Frontoffice**

Update view on selected Analysis Unit

AUNAME	Business Line	Event Name	Org Structure Name	Process
Basel10-TS-EPW	Trading & Sales	Employment Practices and Workplace Safety	Sud	Backoffice
Basel10-TSEPW	Trading & Sales	Employment Practices and Workplace Safety	West	Callcenter
Basel10-TS-EPW	Trading & Sales	Employment Practices and Workplace Safety	Est	Callcenter
Basel10-TS-EPW	Trading & Sales	Employment Practices and Workplace Safety	Est	Online
Basel10-TS-EPW	Trading & Sales	Employment Practices and Workplace Safety	Est	Backoffice
Basel10-TS-EPW	Trading & Sales	Employment Practices and Workplace Safety	West	Frontoffice
Basel10-TS-EPW	Trading & Sales	Employment Practices and Workplace Safety	Sud	Online
Basel10-TS-EPW	Trading & Sales	Employment Practices and Workplace Safety	West	Backoffice
Basel10-TS-EPW	Trading & Sales	Employment Practices and Workplace Safety	Sud	Frontoffice
Basel10-TS-EPW	Trading & Sales	Employment Practices and Workplace Safety	Nord	Callcenter
Basel10-TS-EPW	Trading & Sales	Employment Practices and Workplace Safety	Nord	Online
Basel10-TS-EPW	Trading & Sales	Employment Practices and Workplace Safety	Nord	Backoffice
Basel10-TS-EPW	Trading & Sales	Employment Practices and Workplace Safety	Nord	Frontoffice
Basel10-TS-EPW	Trading & Sales	Employment Practices and Workplace Safety	West	Online
Basel10-TS-EPW	Trading & Sales	Employment Practices and Workplace Safety	Sud	Callcenter
Basel11-TS-OPRP	Trading & Sales	Clients, Products & Business Practices	West	Frontoffice



[illegible]

Figure 15

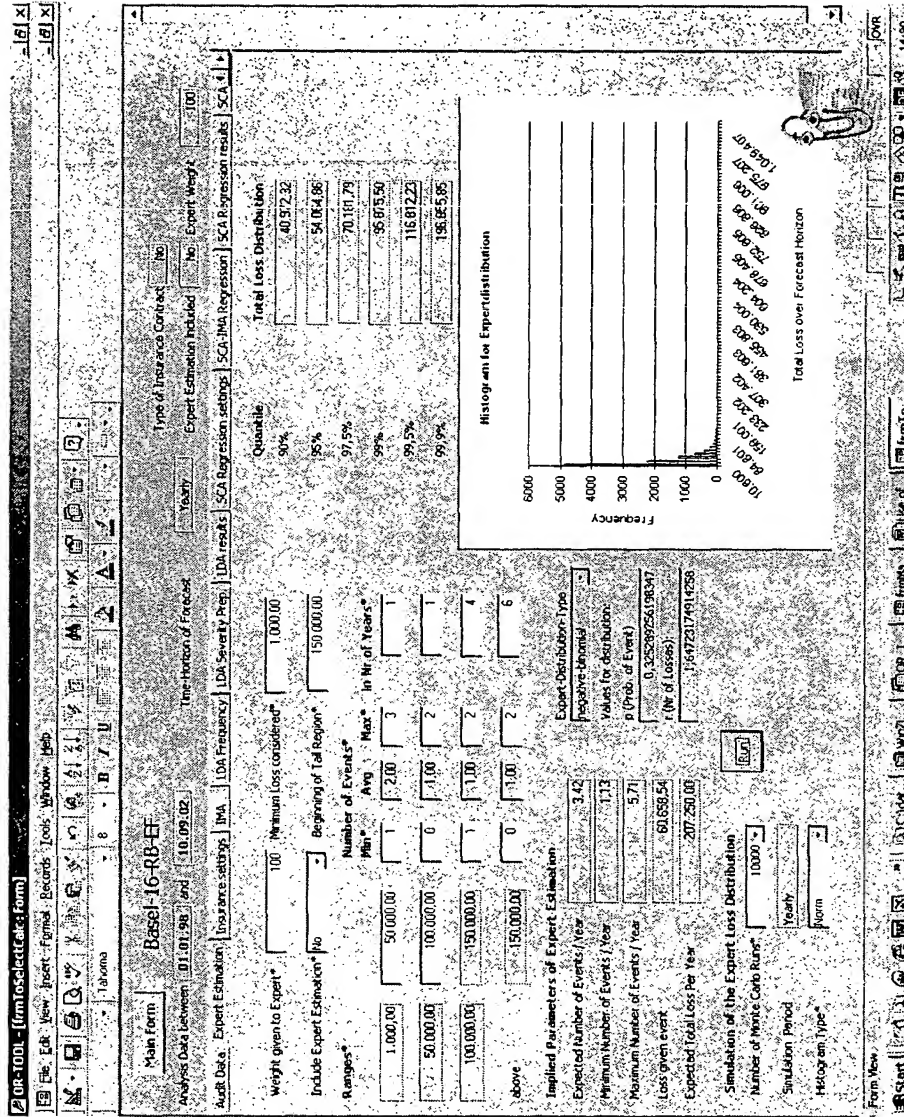


Figure 16

Form View

File Edit View Insert Format Screen Tools Window Help

Table

Main Form: Basel-16-RB-EF

Analysis Date between 01.01.98 and 10.09.02

Time Horizon of Forecast: Yearly

Type of Insurance Contract: 1

Expert Estimation included: No

Expert Weight: 100

Auto Data: Expert Estimation Insurance settings: IMA

LDK Frequency: LDK Severity Prob: LDK results: SCA Regression settings: SCA Regression results: SCA

Calculated Parameters of Internal Measurement Approach

Expected Number of Events (per Yearly): 21.88

Loss given event: 27,497.05

Expected Total Loss (per Yearly): 598,251.79

Exposure Indicator: 0.00

Gaming: 0.00

Regulatory Credit: 0.00

Upper Bound on the 99.9% Quantile (over 1 year): 5,827,134.88

Assuming Finite Variance and applying Chebyshev's Inequality: 6,750,173.05

Assuming Finite Variance and Unimodality (Hoschander-Hoschander Inequality): 6,750,173.05

Form View

Start End OK Cancel Help Window

14:44

Figure 17

DR-100L - (firm) Select Calc Form

File Edit View Insert Format Records Tools Windows Help

MS Sans Serif 8 100%

Main Form, Basel-16-RB-EF

Analysis Data between 01.01.98 and 10.09.02

Time Horizon of Forecast: Yes No

Type of Insurance Contract: 1

Expert Estimation included: No

Export Weight: 100

Audit Data Expert Estimation Insurance settings: IMA LDA Frequency LDA Severity Prop. LDA results SCA Regression results SCA Regression results SCA

Type of Insurance Contract used for Analysis Unit

Type of Insurance Contract: 1

Range of Losses Covered by Insurance

From: 1000.00

To: 40000.00

Proportion of Analysis Unit covered: 1

Proportion of Loss covered: 1

Type 1: Individual insurance cover of severe loss events

Type 2: Collective insurance cover for frequent loss events

Form View

Start End Copy Paste Undo Redo Print Help

Figure 18

DR-100L - [fmt>SelectCalcForm]

File Edit View Insert Format Records Tools Window Help

Tabname: [ ]

Main Form: BASEL-16-RB-EF

Analysis Date between: 01.01.98 and 31.03.02

Time Horizon of Forecast: 100%

Type of Insurance Contract: 11

Expert Estimation Included: No

Expert Weight: 100

Audit Data: Expert Estimation Insurance settings: IMA LDA Frequency: LDA Severity Prep: LDA results: SCA Regression settings: SCA Regression results: SCA

Frequency: [ ]

Poisson Parameter (lambda): [1.81]

Poisson LM Test for Overdispersion: [11.91]

Probability for correctness of Poisson Distribution: [0.00000]

Z-Second Parameter for Negative Binomial Distribution: [1.21]

Recommended Distribution: Negative Binomial

Choice of Distribution: Negative Binomial

Poisson parameter Lambda and Expert Estimation: [1.81]

If choice of distribution is changed by user, the updated information is used for the following LDA calculations.

Sum

Form View

Start Close Print Use of Info

14:46



### Figure 19

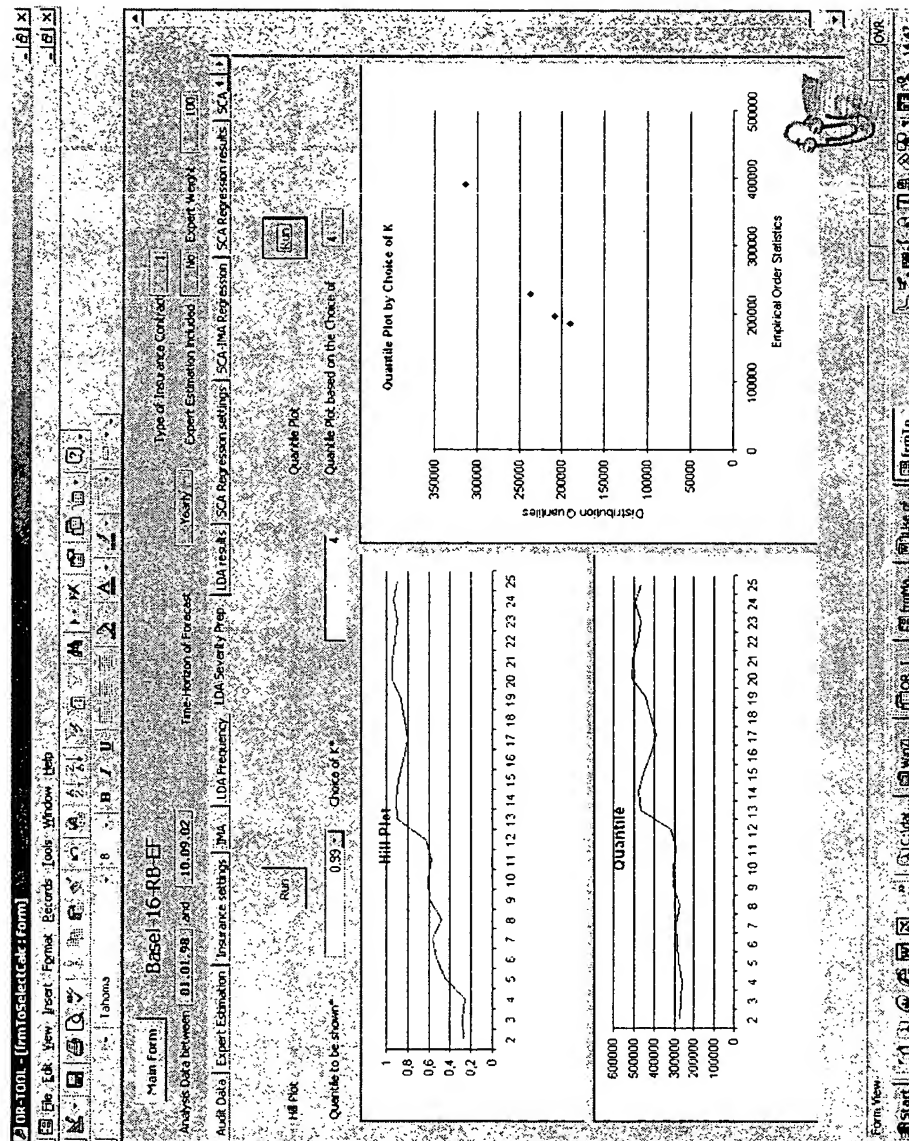


Figure 20

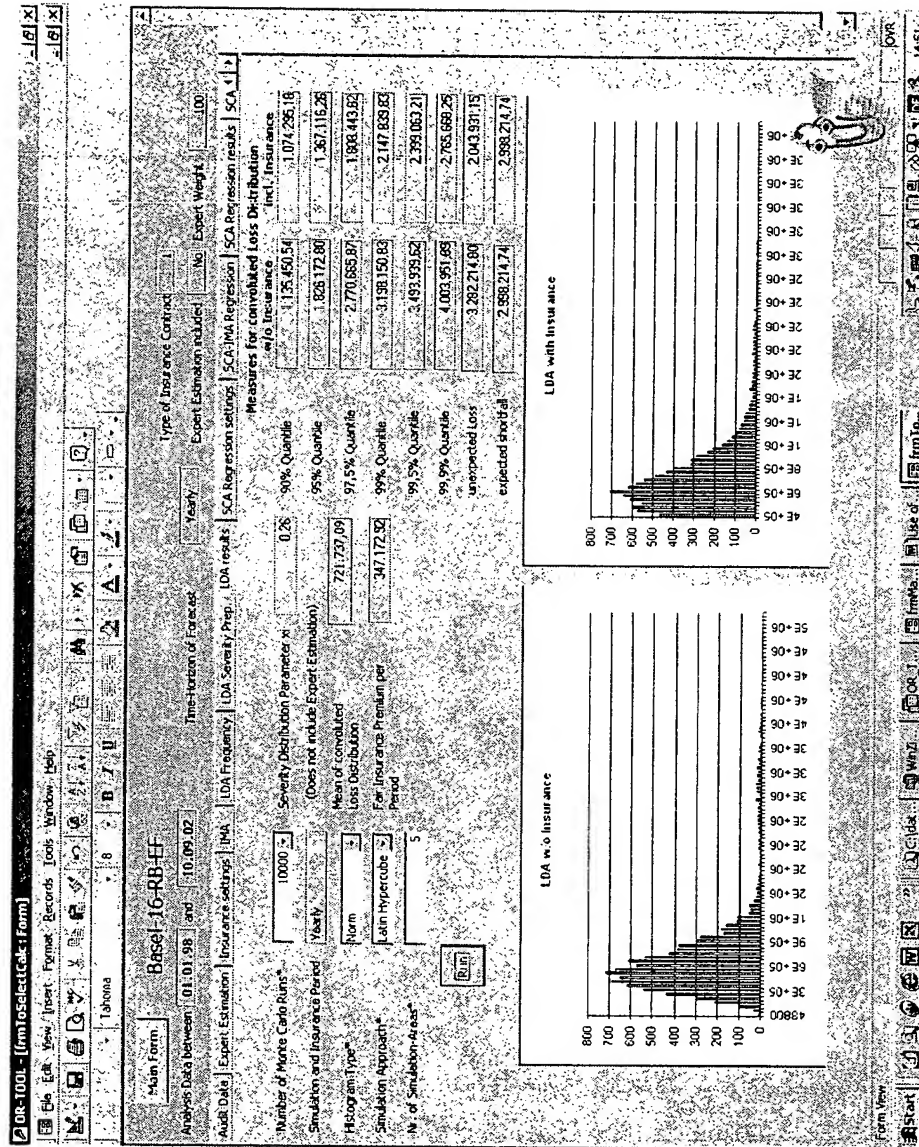


Figure 21

OPR-100L - [frmToSelectCalcForm]  
File Edit View Insert Format Records Tools Window Help  
MS Sans Serif 8  
Run

Main Form: Basel-IG-RB-EF  
Analysis Data between: 01/01/98 and 10/09/02  
Type of Insurance Contract: 1  
Expert Estimation Included: No  
Expert Weight: 100  
Analysis Data: Expert Estimation Insurance Settings: IMA LDA Frequency: LDA Severity Prep: LDA results: SCA Regression settings: SCA Regression results: SCA

Coast Data Regression Approach  
Constant in Poisson Regression: 0.30  
Slope in Poisson Regression: 0.51  
Standard Deviation of Slope: 0.24  
Variance of Rating: Significant  
Poisson LM Test for Overdispersion: 3.86  
Probability LM Test: 0.00  
Negative Binomial Parameter  $\gamma$ : 0.53  
Recommended Regression Model: Poisson  
Choice of Distribution: Poisson  
Actual Rating: 1  
Actual Expected Number of Events / Year: 14.8022453803235

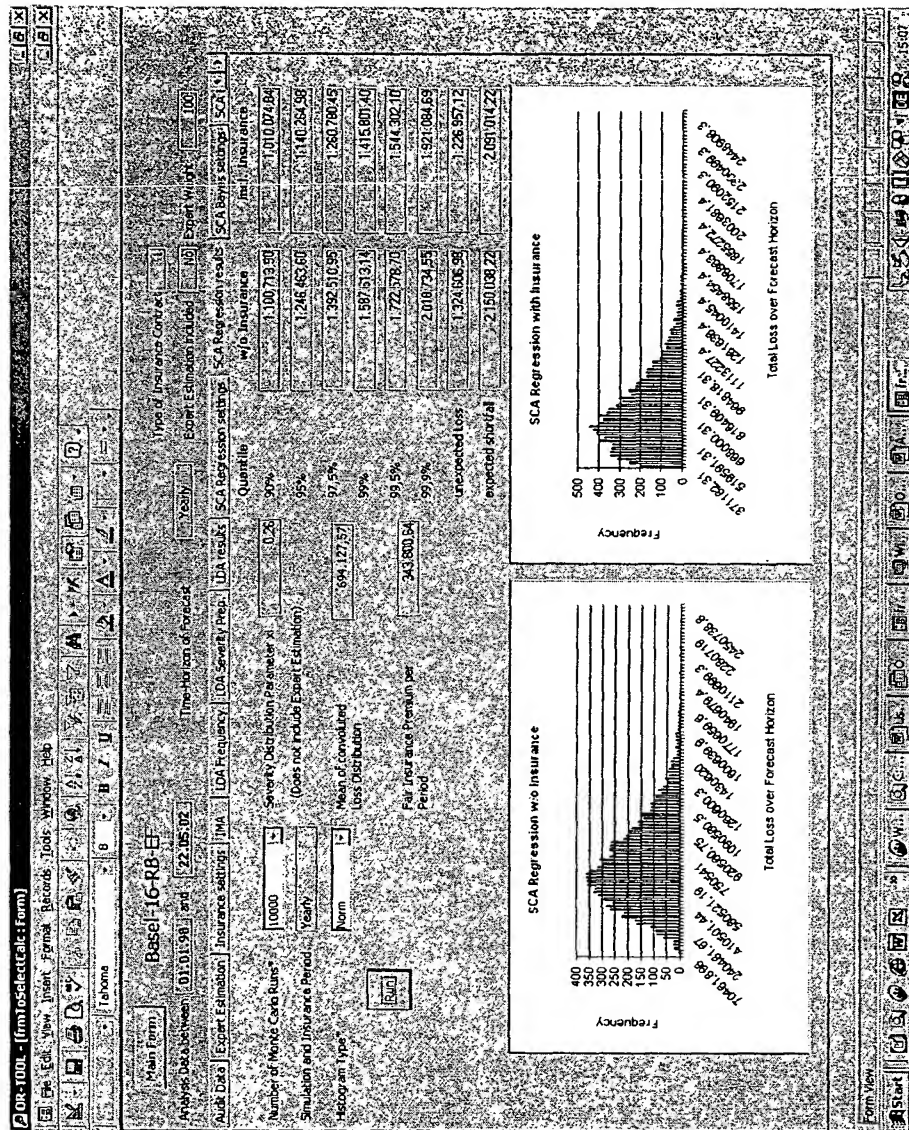
Rating Scenario for previous year  
Month -1\*: 1 Month -7\*: 3  
Month -2\*: 1 Month -8\*: 3  
Month -3\*: 1 Month -9\*: 3  
Month -4\*: 2 Month -10\*: 3  
Month -5\*: 2 Month -11\*: 2  
Month -6\*: 3 Month -12\*: 1

Rating Scenario for next year (Forecast)  
Actual: 1 Month +6\*: 1  
Month +1\*: 1 Month +7\*: 1  
Month +2\*: 1 Month +8\*: 1  
Month +3\*: 1 Month +9\*: 1  
Month +4\*: 1 Month +10\*: 1  
Month +5\*: 1 Month +11\*: 1

Form View  
Start End Copy Paste Undo Redo Print Help  
Case: OPR 14:55



Figure 22



### Figure 23

[illegible]

Figure 24

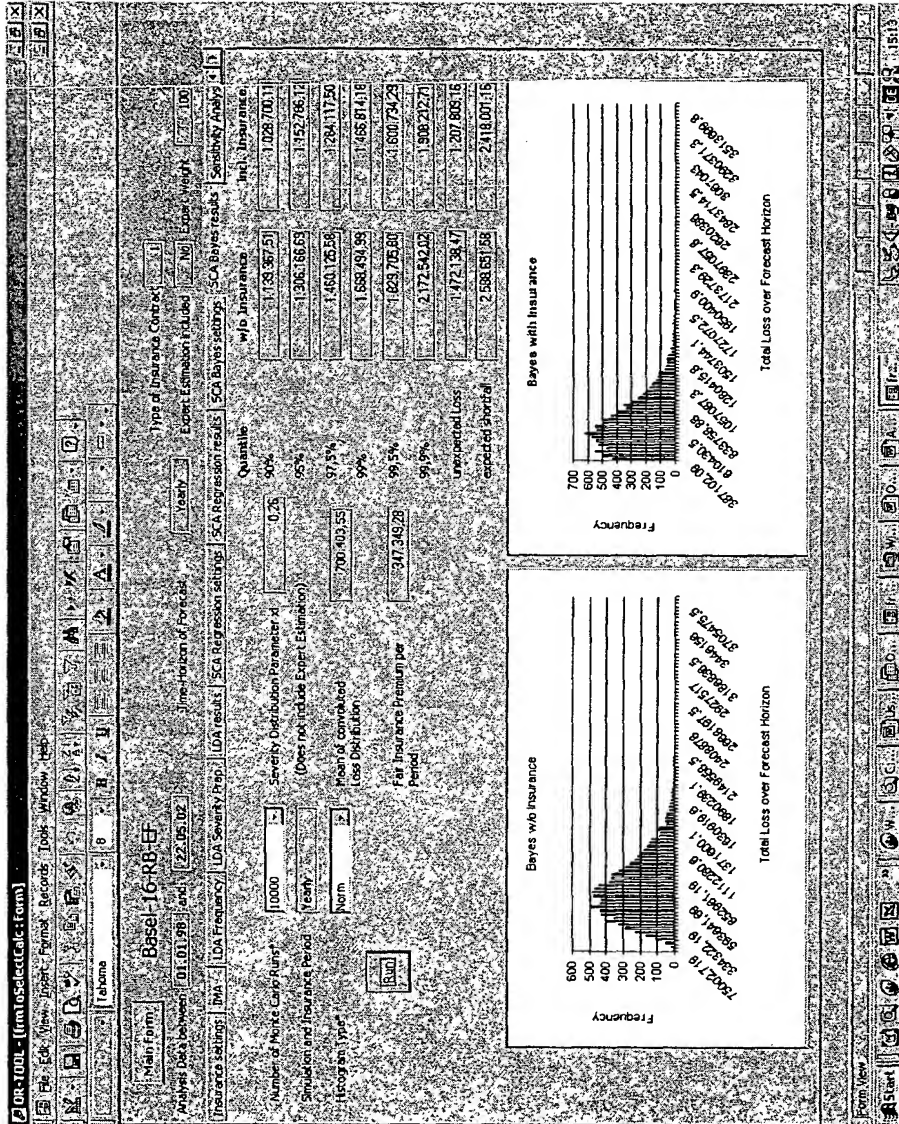


Figure 25

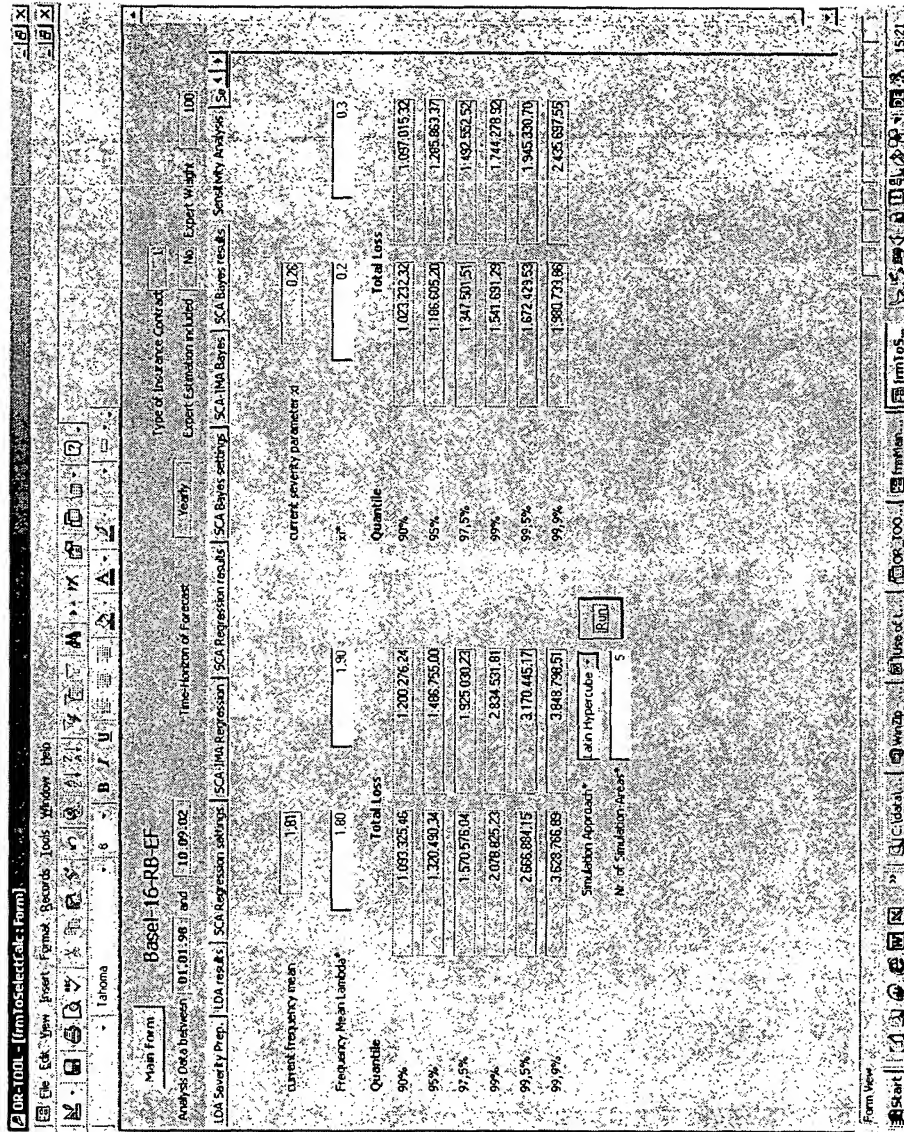




Figure 26

200-1001 - [frmToSelectCalcForm]

File Edit View Insert Format Records Tools Window Help

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100 101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167 168 169 170 171 172 173 174 175 176 177 178 179 180 181 182 183 184 185 186 187 188 189 190 191 192 193 194 195 196 197 198 199 200 201 202 203 204 205 206 207 208 209 210 211 212 213 214 215 216 217 218 219 220 221 222 223 224 225 226 227 228 229 230 231 232 233 234 235 236 237 238 239 240 241 242 243 244 245 246 247 248 249 250 251 252 253 254 255 256 257 258 259 260 261 262 263 264 265 266 267 268 269 270 271 272 273 274 275 276 277 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528 529 530 531 532 533 534 535 536 537 538 539 540 541 542 543 544 545 546 547 548 549 550 551 552 553 554 555 556 557 558 559 560 561 562 563 564 565 566 567 568 569 570 571 572 573 574 575 576 577 578 579 580 581 582 583 584 585 586 587 588 589 590 591 592 593 594 595 596 597 598 599 600 601 602 603 604 605 606 607 608 609 610 611 612 613 614 615 616 617 618 619 620 621 622 623 624 625 626 627 628 629 630 631 632 633 634 635 636 637 638 639 640 641 642 643 644 645 646 647 648 649 650 651 652 653 654 655 656 657 658 659 660 661 662 663 664 665 666 667 668 669 670 671 672 673 674 675 676 677 678 679 680 681 682 683 684 685 686 687 688 689 690 691 692 693 694 695 696 697 698 699 700 701 702 703 704 705 706 707 708 709 710 711 712 713 714 715 716 717 718 719 720 721 722 723 724 725 726 727 728 729 730 731 732 733 734 735 736 737 738 739 740 741 742 743 744 745 746 747 748 749 750 751 752 753 754 755 756 757 758 759 760 761 762 763 764 765 766 767 768 769 770 771 772 773 774 775 776 777 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1822 1823 1824 1825 1826 1827 1828 1829 1830 1831 1832 1833 1834 1835 1836 1837 1838 1839 1840 1841 1842 1843 1844 1845 1846 1847 1848 1849 1850 1851 1852 1853 1854 1855 1856 1857 1858 1859 1860 1861 1862 1863 1864 1865 1866 1867 1868 1869 1870 1871 1872 1873 1874 1875 1876 1877 1878 1879 1880 1881 1882 1883 1884 1885 1886 1887 1888 1889 1890 1891 1892 1893 1894 1895 1896 1897 1898 1899 1900 1901 1902 1903 1904 1905 1906 1907 1908 1909 1910 1911 1912 1913 1914 1915 1916 1917 1918 1919 1920 1921 1922 1923 1924 1925 1926 1927 1928 1929 1930 1931 1932 1933 1934 1935 1936 1937 1938 1939 1940 1941 1942 1943 1944 1945 1946 1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960 1961 1962 1963 1964 1965 1966 1967 1968 1969 1970 1971 1972 1973 1974 1975 1976 1977 1978 1979 1980 1981 1982 1983 1984 1985 1986 1987 1988 1989 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030 2031 2032 2033 2034 2035 2036 2037 2038 2039 2040 2041 2042 2043 2044 2045 2046 2047 2048 2049 2050 2051 2052 2053 2054 2055 2056 2057 2058 2059 2060 2061 2062 2063 2064 2065 2066 2067 2068 2069 2070 2071 2072 2073 2074 2075 2076 2077 2078 2079 2080 2081 2082 2083 2084 2085 2086 2087 2088 2089 2090 2091 2092 2093 2094 2095 2096 2097 2098 2099 2100 2101 2102 2103 2104 2105 2106 2107 2108 2109 2110 2111 2112 2113 2114 2115 2116 2117 2118 2119 2120 2121 2122 2123 2124 2125 2126 2127 2128 2129 2130 2131 2132 2133 2134 2135 2136 2137 2138 2139 2140 2141 2142 2143 2144 2145 2146 2147 2148 2149 2150 2151 2152 2153 2154 2155 2156 2157 2158 2159 2160 2161 2162 2163 2164 2165 2166 2167 2168 2169 2170 2171 2172 2173 2174 2175 2176 2177 2178 2179 2180 2181 2182 2183 2184 2185 2186 2187 2188 2189 2190 2191 2192 2193 2194 2195 2196 2197 2198 2199 2200 2201 2202 2203 2204 2205 2206 2207 2208 2209 2210 2211 2212 2213 2214 2215 2216 2217 2218 2219 2220 2221 2222 2223 2224 2225 2226 2227 2228 2229 2230 2231 2232 2233 2234 2235 2236 2237 2238 2239 2240 2241 2242 2243 2244 2245 2246 2247 2248 2249 2250 2251 2252 2253 2254 2255 2256 2257 2258 2259 2260 2261 2262 2263 2264 2265 2266 2267 2268 2269 2270 2271 2272 2273 2274 2275 2276 2277 2278 2279 2280 2281 2282 2283 2284 2285 2286 2287 2288 2289 2290 2291 2292 2293 2294 2295 2296 2297 2298 2299 2300 2301 2302 2303 2304 2305 2306 2307 2308 2309 2310 2311 2312 2313 2314 2315 2316 2317 2318 2319 2320 2321 2322 2323 2324 2325 2326 2327 2328 2329 2330 2331 2332 2333 2334 2335 2336 2337 2338 2339 2340 2341 2342 2343 2344 2345 2346 2347 2348 2349 2350 2351 2352 2353 2354 2355 2356 2357 2358 2359 2360 2361 2362 2363 2364 2365 2366 2367 2368 2369 2370 2371 2372 2373 2374 2375 2376 2377 2378 2379 2380 2381 2382 2383 2384 2385 2386 2387 2388 2389 2390 2391 2392 2393 2394 2395 2396 2397 2398 2399 2400 2401 2402 2403 2404 2405 2406 2407 2408 2409 2410 2411 2412 2413 2414 2415 2416 2417 2418 2419 2420 2421 2422 2423 2424 2425 2426 2427 2428 2429 2430 2431 2432 2433 2434 2435 2436 2437 2438 2439 2440 2441 2442 2443 2444 2445 2446 2447 2448 2449 2450 2451 2452 2453 2454 2455 2456 2457 2458 2459 2460 2461 2462 2463 2464 2465 2466 2467 2468 2469 2470 2471 2472 2473 2474 2475 2476 2477 2478 2479 2480 2481 2482 2483 2484 2485 2486 2487 2488 2489 2490 2491 2492 2493 2494 2495 2496 2497 2498 2499 2500 2501 2502 2503 2504 2505 2506 2507 2508 2509 2510 2511 2512 2513 2514 2515 2516 2517 2518 2519 2520 2521 2522 2523 2524 2525 2526 2527 2528 2529 2530 2531 2532 2533 2534 2535 2536 2537 2538 2539 2540 2541 2542 2543 2544 2545 2546 2547 2548 2549 2550 2551 2552 2553 2554 2555 2556 2557 2558 2559 2560 2561 2562 2563 2564 2565 2566 2567 2568 2569 2570 2571 2572 2573 2574 2575 2576 2577 2578 2579 2580 2581 2582 2583 2584 2585 2586 2587 2588 2589 2590 2591 2592 2593 2594 2595 2596 2597 2598 2599 2600 2601 2602 2603 2604 2605 2606 2607 2608 2609 2610 2611 2612 2613 2614 2615 2616 2617 2618 2619 2620 2621 2622 2623 2624 2625 2626 2627 2628 2629 2630 2631 2632 2633 2634 2635 2636 2637 2638 2639 2640 2641 2642 2643 2644 2645 2646 2647 2648 2649 2650 2651 26

Figure 27

Form View

File Edit View Insert Format Records Tools Window Help

8

Phone

### Aggregation Tree Definition

Aggregation level: Level 7

Available sources:

Baseel-10-TS-EPW
Baseel-11-TS-CPPp
Baseel-12-TS-DPA
Baseel-13-TS-BDSF
Baseel-14-TS-EDPM
Baseel-15-RB-IF
Baseel-17-RB-EPW
Baseel-18-RB-CPPp
Baseel-19-RB-DPA
Baseel-1-CF-IF
Baseel-20-RB-BDSF
Baseel-21-RB-EDPM
Baseel-22-CF-IF
Baseel-24-CB-EPW
Baseel-25-CB-CPPp
Baseel-26-CB-DPA
Baseel-27-CB-BDSF
Baseel-28-CB-EDPM
Baseel-29-PS-IF
Baseel-31-PS-EPW

Add =>

<= Delete

Split source

Split all

Aggregations:

External Fraud - Investment Banking
External Fraud - Energy
External Fraud - Others

Delete Aggregation Tree ?

Members of selected Agg system:

Baseel-16-GB-EF
Baseel-23-CB-EF
Baseel-30-PS-EF
Baseel-37-ASC-EF

Aggregation name: Create

Form View

Figure 28

OR-100L - [fmt:Defn:Aggregation:form]

File Edit View Insert Format Sources Tools Window Help

Form View

Aggregation level: Level 6

Available sources:

Aggregation:

External Fraud - Total

Numbers of selected aggregation:

External Fraud - Banking  
External Fraud - Investment Banking  
External Fraud - Others

Delete Aggregation Tree

Add <=>>>  
<=> Delete

Shift source <=>>>  
Shift all <=>>>

Aggregation name: Create

Figure 29

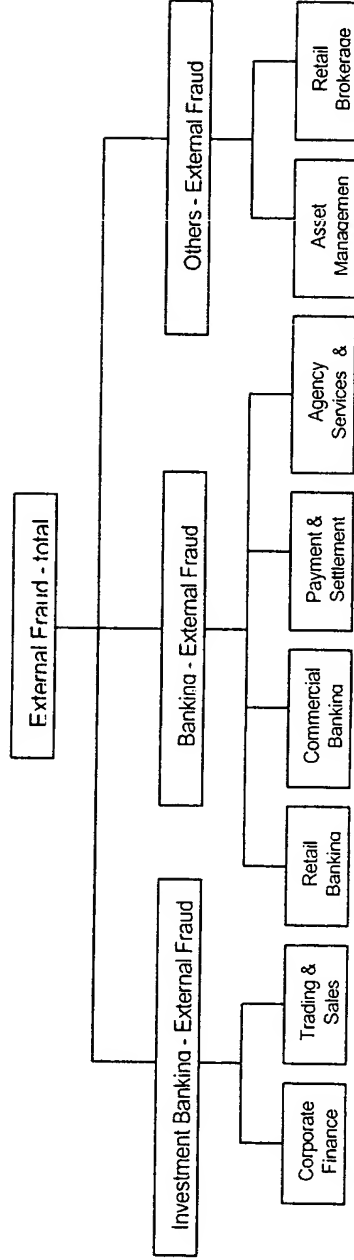




Figure 30

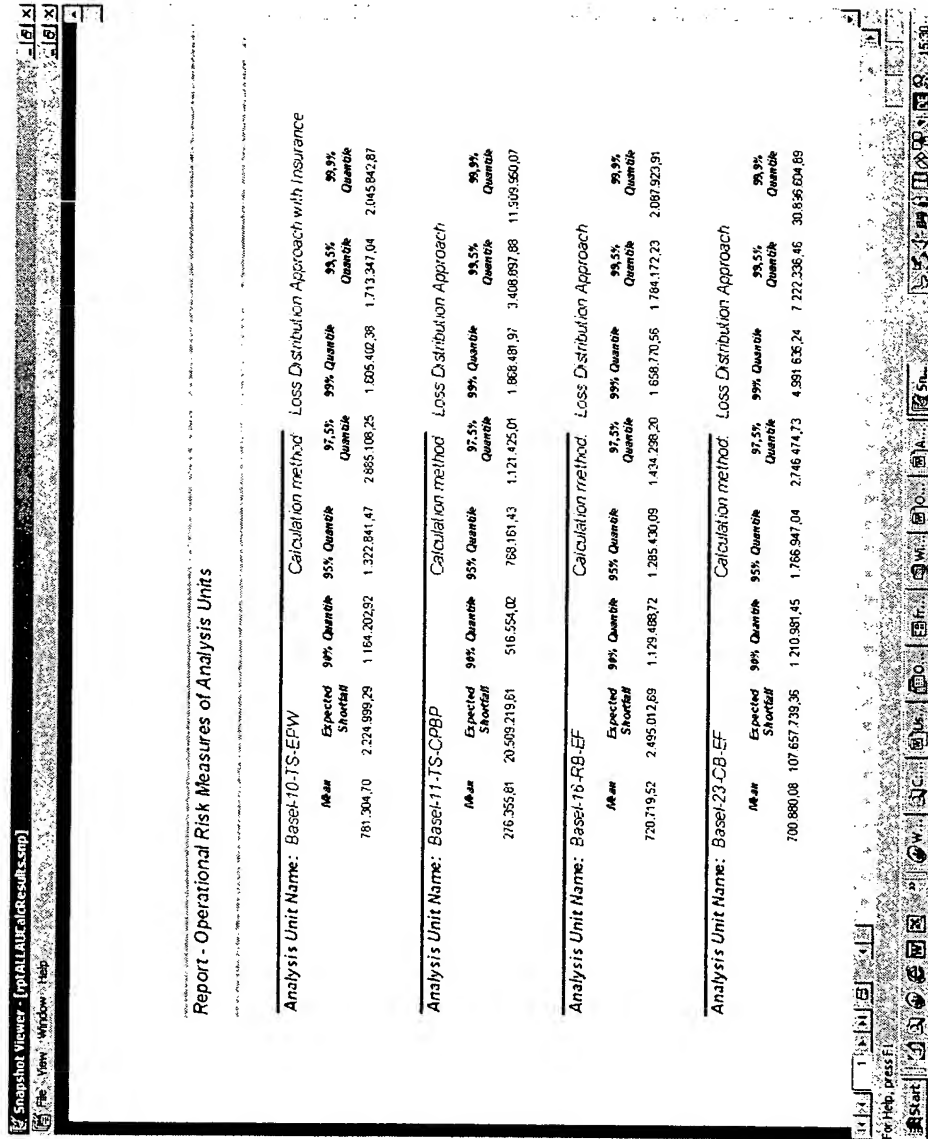


Figure 31

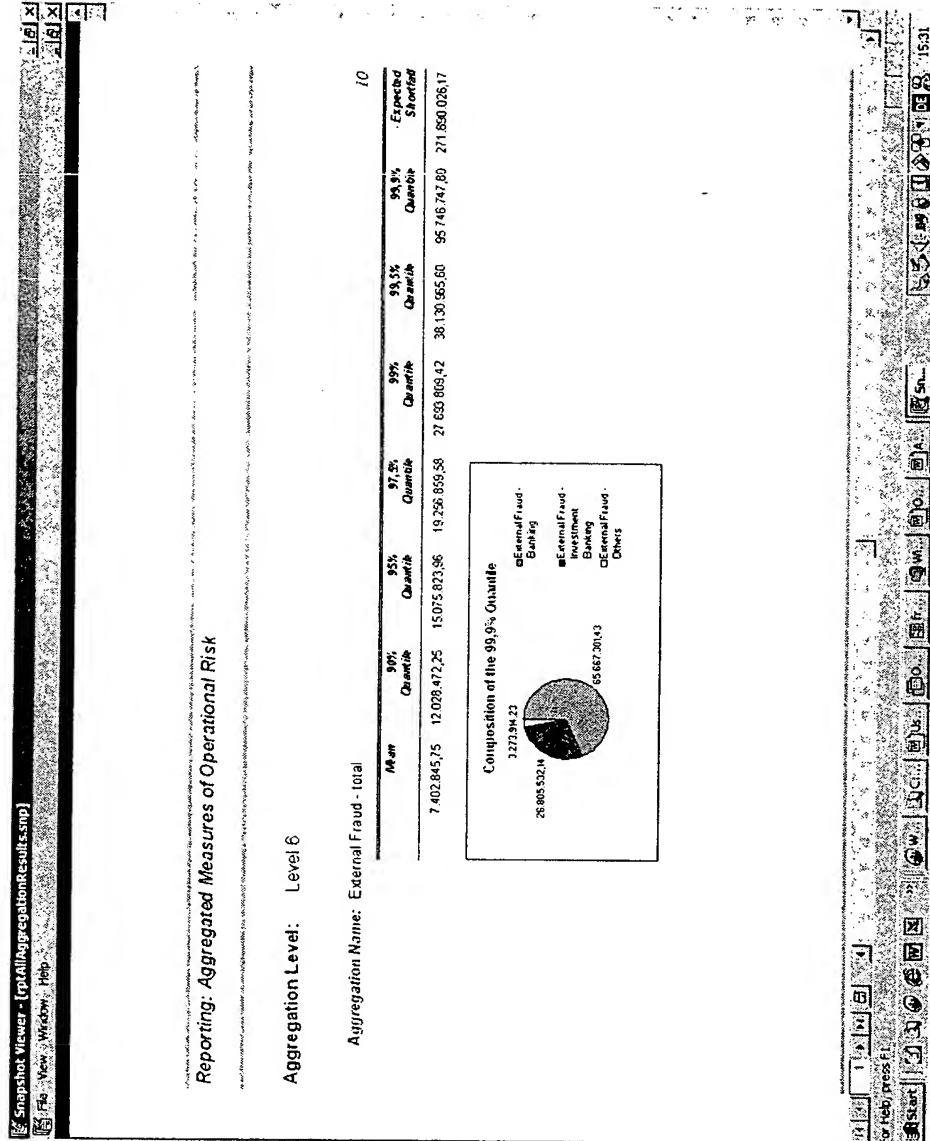


Figure 32

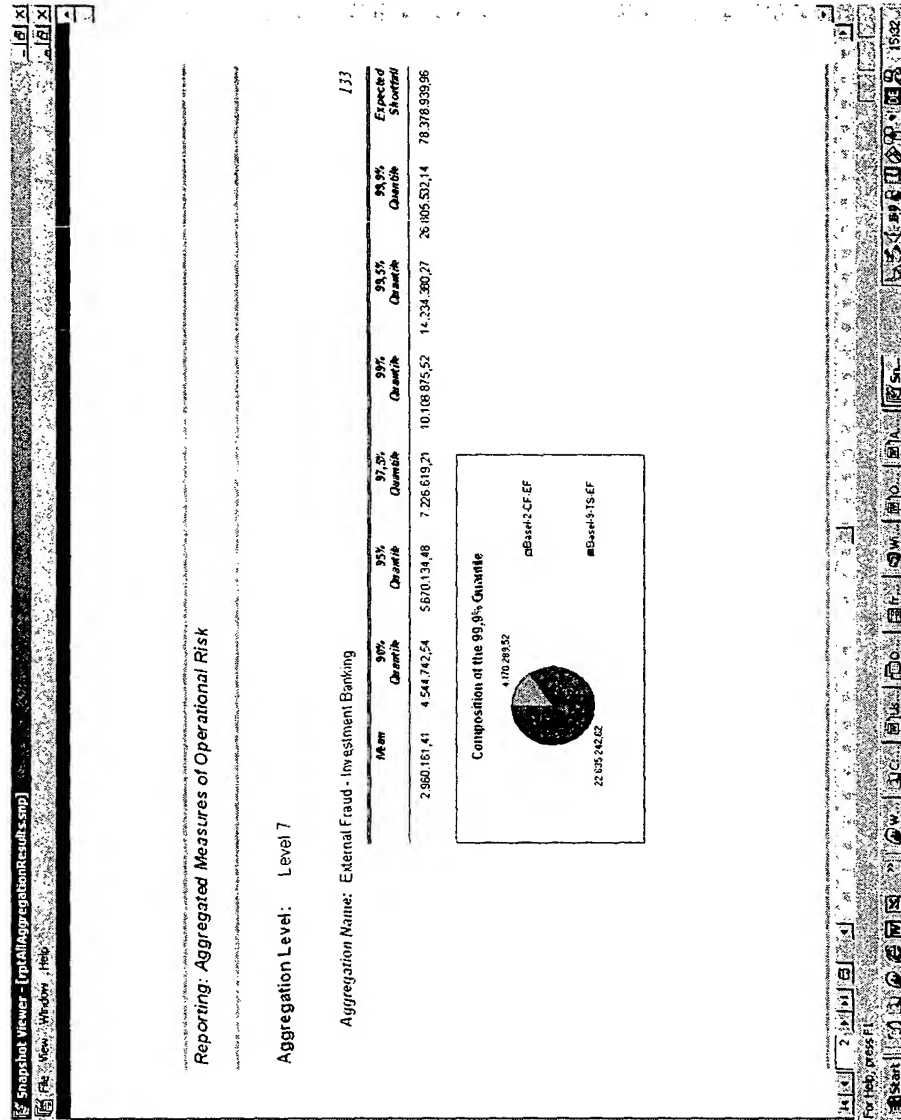


Figure 33

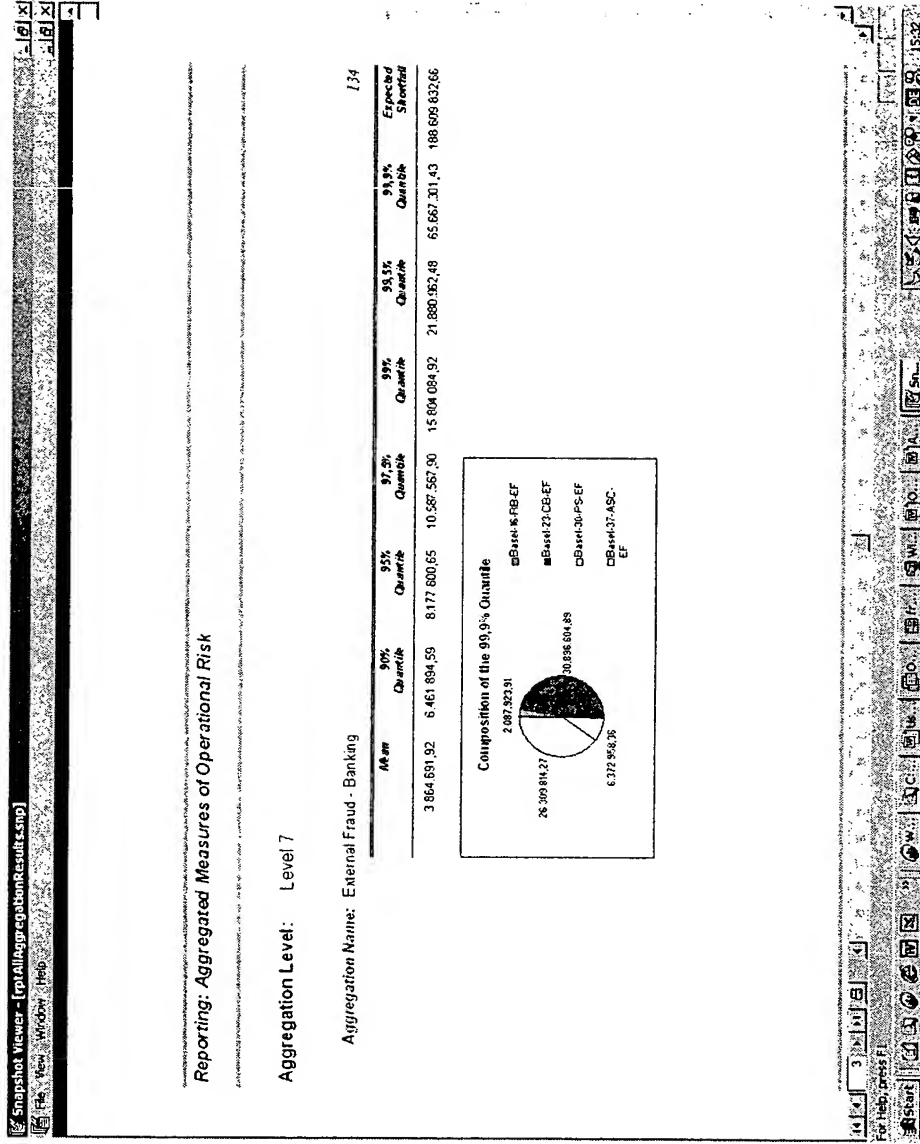


Figure 34

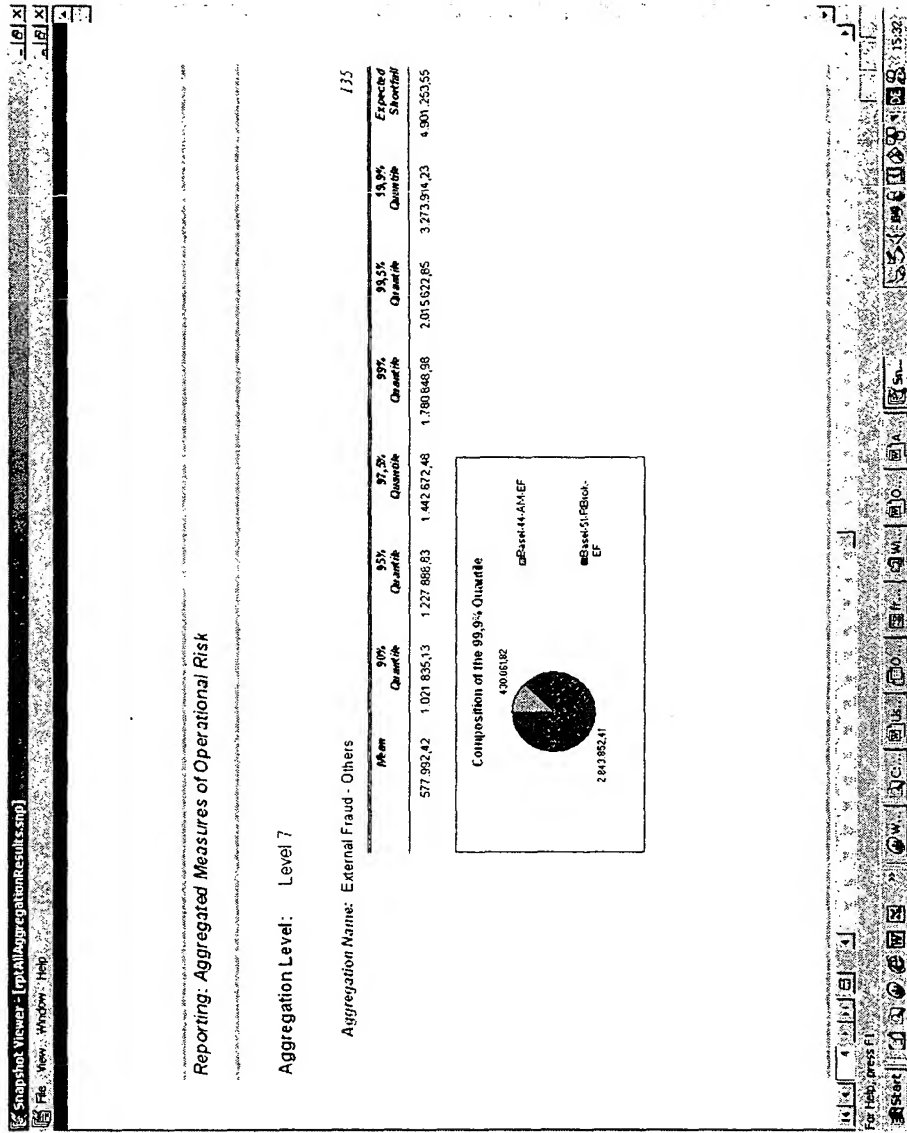


Figure 35

MS Word - [Untitled1.docx] File Edit View Insert Format Records Tools Window Help

MS Sans Serif 18

Lost/Encountered Date: 8/5/2005

Lost/Date: 8/5/2005

Business Line: Payment and Settlement External Fraud

Org/Subsidiary Line: West

Process: Frontoffice

Lost/Description:  
 A former financial adviser was jailed for misappropriation and longer charges relating to the forgery of redemption certificate requests for withdrawal for eight of his clients.

Scoring Description: Scoring: 0.2  
 processes are more manual

Next Record

Form View

MS Word - [Untitled1.docx] File Edit View Insert Format Records Tools Window Help

MS Sans Serif 18

Lost/Encountered Date: 8/5/2005

Lost/Date: 8/5/2005

Business Line: Payment and Settlement External Fraud

Org/Subsidiary Line: West

Process: Frontoffice

Lost/Description:  
 A former financial adviser was jailed for misappropriation and longer charges relating to the forgery of redemption certificate requests for withdrawal for eight of his clients.

Scoring Description: Scoring: 0.2  
 processes are more manual

Next Record

Form View

Figure 36

DR-100L - (Internal Losses Configured)

File Edit View Insert Format Records Tools Window Help

MS Sans Serif 10

### Defined Properties on Base-Node Level

Relevant Check Point	Description	mu	sigma
P1: Versicherungswirtschaft		0.49	0.6
P2: Technischen PM		0.95	0.03
P3: Test3		0.95	0.03
P4: Test4		0.4	0.3
P5: Test5		0.5	0.55

Cut-off value: 100540

BusinessLine: Corporate France  
 EventType: Internal Fraud

**Calculate**  
 Recalculate Internal Probability and Loss Value for Selected Business/Event Type

**Apply Defined Check-Points:**

☒ Point 1  
☒ Point 2  
☐ Point 3  
☐ Point 4  
☐ Point 5

**Internal Probability:** 0.633221441/219

**Internal Loss Value:** 66700

**Loss Value:** 66700

**Loss Date:** 20-Mrz-00

**Loss Description:**  
 In June 1998, the Personal Investment Authority (PIA) leveled a 400,000 GBP fine against Financial Options for practices related to pensions not selling Financial Options was also cited for "grave faults in the firm's recruitment, training, and supervi...

**BusinessLine:** Corporate France  
**EventName:** Internal Fraud  
**OrgStructureName:** Nord  
**Process:** Backoffice  
**LossDocumentDate:** 20-Mrz-00

**Calculate**  
 Recalculate Internal Probability and Loss Value for Selected Business/Event Type

Recalculates the Internal Probability and Loss Value for Selected Business/Event Type

File Edit View Insert Format Records Tools Window Help

[illegible]





[illegible]

Figure 40

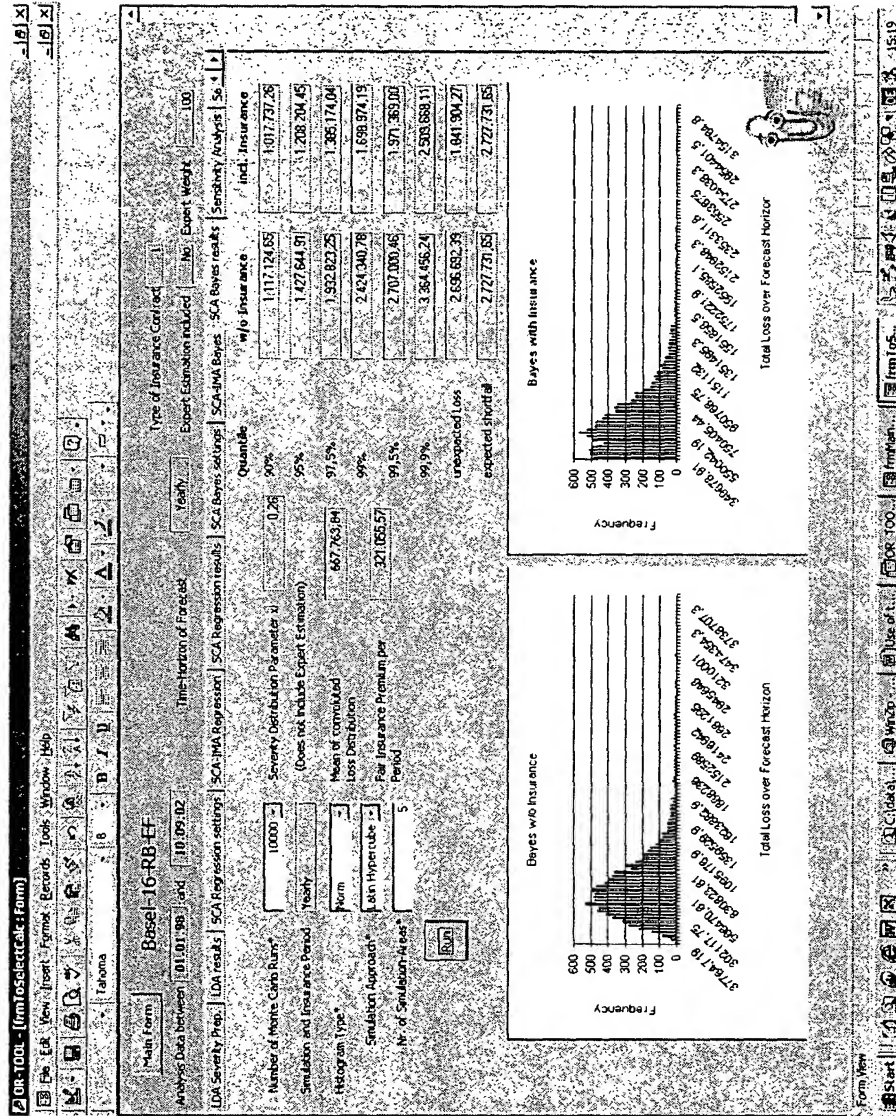


Figure 41

002-1001 - (frmAggregationsOverview.frm)

File Edit View Insert Format Records Tools Window Help

Alabama 8

Overview - Aggregations

Aggregation Level 7 External Fraud - Investment B External Fraud - Banking External Fraud - Others	Aggregation Level 6 External Fraud - Total	Aggregation Level 5	Aggregation Bank Level
Level 7 Report	Level 6 Report	Level 5 Report	Bank Level Report
Aggregation Level 4	Aggregation Level 3	Aggregation Level 2	
Level 4 Report	Level 3 Report	Level 2 Report	

Form View

Print Start Undo Redo Copy Paste Find Replace Print Preview Print Close

002-1001 15:23

Figure 42

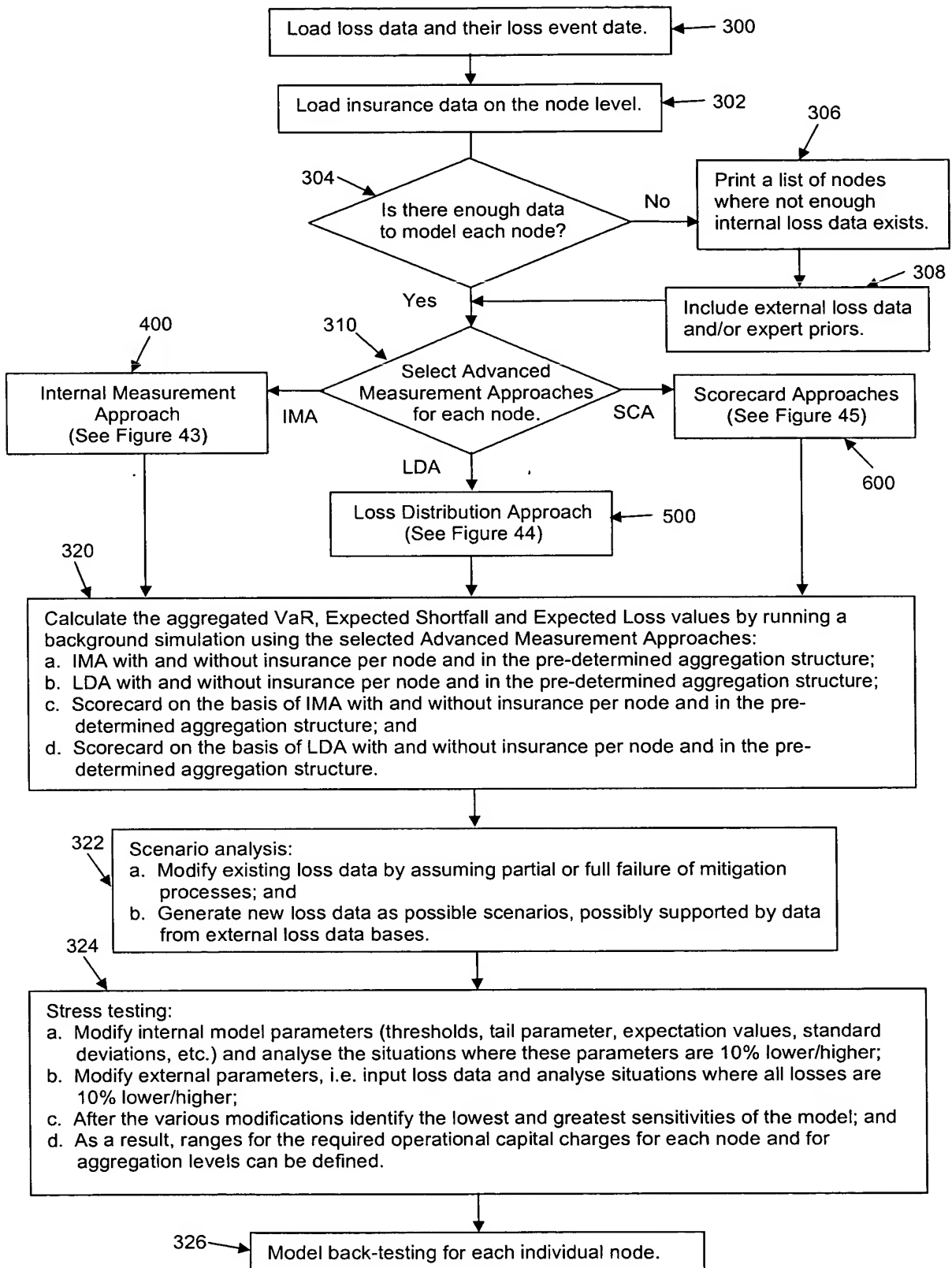


Figure 43

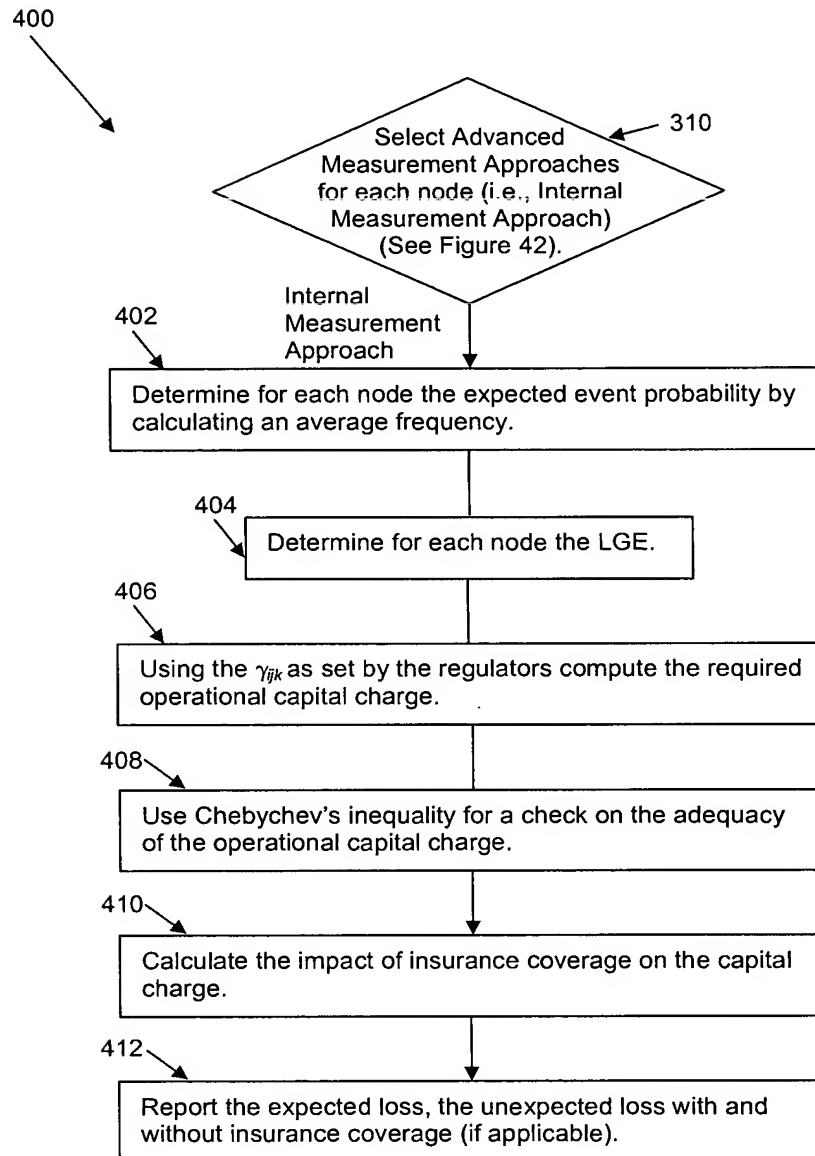


Figure 44

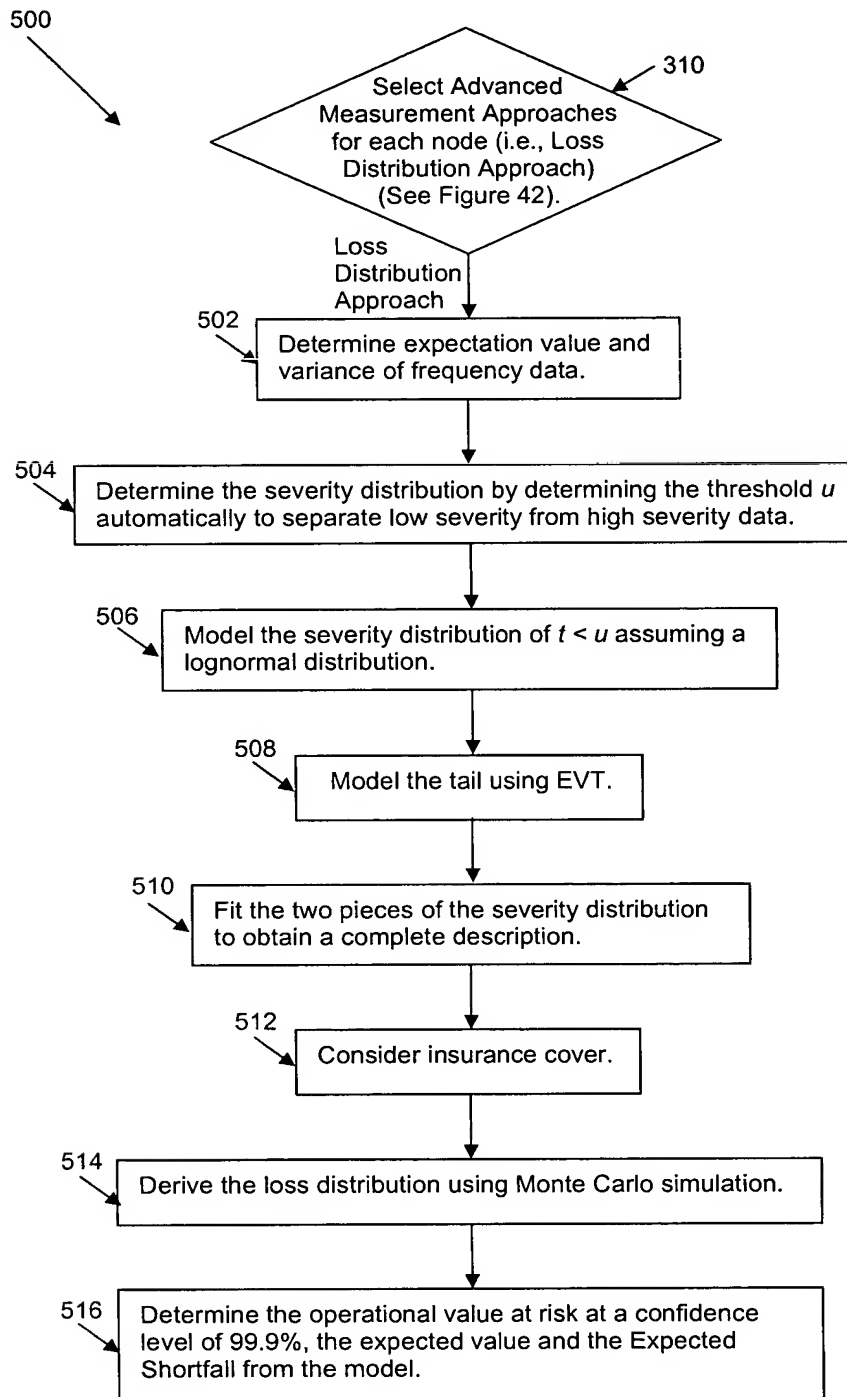


Figure 45

